

1. (Currently amended) A continuous ink jet printer, comprising:
  - a first ink jet printing nozzle for a first color positioned to deposit ink drops on a substrate,
  - a first deflection element located proximate an output trajectory of the first ink jet printing nozzle and operative to deflect the ink drops from the first nozzle by different amounts such that differently deflected ink drops are deposited in a swathed pattern as they are deposited on the substrate by the first ink jet printing nozzle,
  - a second ink jet printing nozzle for the first color positioned to deposit ink drops on the substrate,
  - a second deflection element located proximate an output trajectory of the second ink jet printing nozzle and operative to deflect the ink drops from the second nozzle by different amounts such that differently deflected ink drops are deposited in a swathed pattern as they are deposited on the substrate by the second ink jet printing nozzle, and
  - interleaving logic operative to provide interleaved print data to interleave at least one deflected drop from the first ink jet printing nozzle with a plurality of deflected drops from the second ink jet printing nozzle in parallel offset rasters.
2. (Previously presented) The continuous ink jet printer of claim 1 wherein the interleaving logic includes horizontal interleaving logic.
3. (Previously presented) The continuous ink jet printer of claim 2 wherein the interleaving logic includes vertical interleaving logic.
4. (Previously presented) The continuous ink jet printer of claim 1 wherein the interleaving logic includes vertical interleaving logic.
5. (Previously presented) The continuous ink jet printer of claim 1 further including a processor portion operative to drive the printer to print half-tone images on a print substrate.
6. (Previously presented) The continuous ink jet printer of claim 1 wherein the print substrate is a printing plate.

7. (Previously presented) The continuous ink jet printer of claim 1 wherein the deflection element is one of a pair of deflection electrodes.

8. (Currently amended) ~~The~~A continuous ink jet printer ~~of claim 1 further including,~~  
comprising:

a first ink jet printing nozzle for a first color positioned to deposit ink drops on a substrate,

a first deflection element located proximate an output trajectory of the first ink jet printing nozzle and operative to deflect the ink drops in a swathed pattern as they are deposited on the substrate by the first ink jet printing nozzle,

a second ink jet printing nozzle for the first color positioned to deposit ink drops on the substrate,

a second deflection element located proximate an output trajectory of the second ink jet printing nozzle and operative to deflect the ink drops in a swathed pattern as they are deposited on the substrate by the second ink jet printing nozzle,

interleaving logic operative to provide interleaved print data to interleave at least one deflected drop from the first ink jet printing nozzle with a plurality of deflected drops from the second ink jet printing nozzle in parallel offset rasters, and

swathing logic that includes a series of different firing order entries that define different deflection amounts for at least one of the deflection elements.

9. (Previously presented) The continuous ink jet printer of claim 1 further including halftone screening logic and wherein the first and second ink jet printing nozzles are responsive to the halftone screening logic.

10. (Previously presented) The continuous ink jet printer of claim 1 wherein the first ink jet printing nozzle and the second ink jet printing nozzle are both located on a same print head.

11. (Previously presented) The continuous ink jet printer of claim 1 wherein the first and second ink jet printing nozzles are spaced along a direction of rotation of a drum.

12. (Previously presented) The continuous ink jet printer of claim 1 wherein the interleaving logic is operative to cause the first and second ink jet printing nozzles to print simultaneously.

13. (Previously presented) The continuous ink jet printer of claim 1 wherein the interleaving logic is operative to cause the first and second ink jet printing nozzles to print drops interleaved with each other during a same pass.

14. (Currently amended) The continuous ink jet printer of claim 1 wherein the interleaving logic is operative to cause the first and second ink jet printing nozzles to print drops interleaved with each other during different passes.

15. (Previously presented) The continuous ink jet printer of claim 1 wherein the interleaving logic is operative to cause the first and second ink jet printing nozzles to print drops interleaved with each other during a same revolution.

16. (Previously presented) The continuous ink jet printer of claim 1 wherein the interleaving logic is operative to cause the first and second ink jet printing nozzles to print drops interleaved with each other during different revolutions.

17. (Previously presented) The continuous ink jet printer of claim 1 further including a substrate feed mechanism to feed the substrate.

18. (Previously presented) The continuous ink jet printer of claim 1 wherein the substrate feed mechanism includes a drum.

19. (Previously presented) The continuous ink jet printer of claim 18 wherein the first and second ink jet printing nozzles are in a series of nozzles spaced along a direction of rotation of the drum.

20. (Previously presented) The continuous ink jet printer of claim 1 wherein the substrate feed mechanism includes a platen.

21. (Currently amended) ~~The~~A continuous ink jet printer of claim 1 further including, comprising:

a first ink jet printing nozzle for a first color positioned to deposit ink drops on a substrate,

\_\_\_\_\_ a first deflection element located proximate an output trajectory of the first ink jet printing nozzle and operative to deflect the ink drops in a swathed pattern as they are deposited on the substrate by the first ink jet printing nozzle,

\_\_\_\_\_ a second ink jet printing nozzle for the first color positioned to deposit ink drops on the substrate,

\_\_\_\_\_ a second deflection element located proximate an output trajectory of the second ink jet printing nozzle and operative to deflect the ink drops in a swathed pattern as they are deposited on the substrate by the second ink jet printing nozzle,

\_\_\_\_\_ interleaving logic operative to provide interleaved print data to interleave at least one deflected drop from the first ink jet printing nozzle with a plurality of deflected drops from the second ink jet printing nozzle in parallel offset rasters, and

\_\_\_\_\_ self-interleaving logic operative to further interleave deflected drops from at least one of the first and second ink jet printing nozzles with other deflected drops from that same nozzle.

22. (Currently amended) A continuous ink jet printing method, comprising:

firing a first stream of ink drops,

deflecting drops in the first stream by different amounts to create a first swathed deposition pattern in which different deposited drops are deflected by different amounts,

firing a second stream of ink drops, and

deflecting drops in the second stream by different amounts to create a second swathed deposition pattern in which different deposited drops are deflected by different amounts, and wherein the second swathed deposition pattern is interleaved with the first swathed deposition pattern.

23. (Previously presented) The method of claim 22 wherein the steps of firing a first stream and firing a second stream take place simultaneously.

24. (Previously presented) The method of claim 22 wherein the steps of firing a first stream and firing a second stream deposit the drops on a drum according to a helical progression over a plurality of revolutions.

25. (Currently amended) A continuous ink jet printer, comprising:

means for firing a first stream of ink drops,

means for deflecting drops in the first stream by different amounts to create a first swathed deposition pattern in which different deposited drops are deflected by different amounts,

means for firing a second stream of ink drops, and

means for deflecting drops in the second stream to create a second swathed deposition pattern in which different deposited drops are deflected by different amounts, and wherein the second swathed deposition pattern is interleaved with the first swathed deposition pattern.

\_\_\_\_\_ 26. (Currently amended) ~~The~~ A continuous ink jet printer of claim 25 further including, comprising:

\_\_\_\_\_ means for firing a first stream of ink drops,

\_\_\_\_\_ means for deflecting drops in the first stream by different amounts to create a first swathed deposition pattern in which different deposited drops are deflected by different amounts,

\_\_\_\_\_ means for firing a second stream of ink drops,

\_\_\_\_\_ means for deflecting drops in the second stream to create a second swathed deposition pattern in which different deposited drops are deflected by different amounts, and wherein the second swathed deposition pattern is interleaved with the first swathed deposition pattern, and

swathing means that include a series of different firing order entries that define different deflection amounts for at least one of the means for deflecting.

27. (Previously presented) The continuous ink jet printer of claim 25 further including halftone screening means and wherein the means for firing are responsive to the halftone screening means.

28. (Previously presented) The continuous ink jet printer of claim 25 further including means for feeding a substrate to be printed on by the continuous ink jet printer.